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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,047	07/11/2001	Yuri V. Melnik	23600-7006	9410

7590 10/30/2002

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EXAMINER

HITESHEW, FELISA CARLA

ART UNIT	PAPER NUMBER
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1765

DATE MAILED: 10/30/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/903,047

Applicant(s)

MELNIK ET AL.

Examiner

Felisa C. Hiteshew

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,5-21 and 24-28 is/are allowed.
- 6) ☒ Claim(s) 3,4,22 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

***Information Disclosure Statement***

The Information Disclosure Statement under 37 C.F.R. 1.97 has been received and reviewed. However, the information disclosure is not deemed to be pertinent over the prior art of record.

***Claim Rejections - 35 USC § 112***

1. Claim 3 recites the limitation "HCL gas" in line 2. There is insufficient antecedent basis for this limitation in the claim. Please insert the word -a—before the "HCL" for proper antecedence.
2. Claim 4 recites the limitation "ammonia gas" in line 2. There is insufficient antecedent basis for this limitation in the claim. Please insert the word -an—before the word "ammonia" for proper antecedence.
3. Claim 22 recites the limitation "HCL gas" in line 2. There is insufficient antecedent basis for this limitation in the claim. Please insert the word -a— before the "HCL" for proper antecedence.
4. Claim 23 recites the limitation "HCL gas" in line 2. There is insufficient antecedent basis for this limitation in the claim. Please insert the word -an—before the word "ammonia" for proper antecedence.

***Allowable Subject Matter***

5. Claims 1, 2, 5-21 and 24-28 are allowed.
6. The following is a statement of reasons for the indication of allowable subject matter: The most relevant prior art of record is that which did the applicants submit. However, it does not teach nor fairly suggest singularly or in any combination thereof a

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method of growing an AlGa<sub>N</sub> single crystal boule, the method comprising the steps of:  
growing an AlGa<sub>N</sub> single crystal layer on a substrate; removing said substrate from said AlGa<sub>N</sub> single crystal layer; growing the AlGa<sub>N</sub> single crystal boule on a surface of said AlGa<sub>N</sub> single crystal layer; and continuing said step of growing the AlGa<sub>N</sub> single crystal boule until the AlGa<sub>N</sub> single crystal boule has a length of greater than 1 centimeter.

7. Claims 3, 4, 22 and 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felisa Hiteshew whose telephone number is (703) 308-2545. The examiner can normally be reached on Mondays through Thursdays from 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Utech, can be reached on (703) 308-3836. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
FELISA HITESHEW  
PRIMARY EXAMINER  
AU 1765